the stem), which rapidly augments, both in absolute and in proportional size, when the development of the dorsal cirri is taking place from its convex surface. By the end of the Pentacrinoid stage, this plate has extended itself so far over the base of the calyx as completely to conceal the basals; and as the free Antedon advances towards maturity, it gradually extends itself over the first radials, which then become adherent to it and to each other. The basals then undergo a most curious metamorphosis, consisting in absorption in one part and extension in another, by which they finally become converted into five peculiarly shaped pieces, the ultimate union of which forms the single rosette-like plate, which has been already stated to lie within the annulus formed by the first radials of the adult *Antedon*. Hence the calyx finally comes to be thus composed:—

$$\begin{array}{c} \begin{array}{ccccc} R^3 & R^3 & R^3 & R^3 & R^3 \\ R^2 & R^2 & R^2 & R^2 & R^2 \end{array} \\ \underbrace{\overbrace{b\ R^1}\ \overbrace{b\ R^1}\ \overbrace{b\ R^1}\ \overbrace{b\ R^1}\ b\ R^1}_{\text{Centro-dorsal.}} \end{array}$$

As the *orals* and the *anal* have entirely disappeared, no part of the primordial calyx of the Pentacrinoid larva is traceable in it, until we separate the adherent pieces which form its base, and search out the minute and delicate rosette-like plate which is formed by the metamorphosis of the *basals*.

The structure, physiology, and development of the digestive, circulatory, and respiratory apparatus, and of the nervous and muscular systems, will form the subject of a future memoir.

XVII. "On the Chameleon's Retina; a further contribution to the Minute Anatomy of the Retina of Amphibia and Reptiles." By J. W. Hulke, Esq. Communicated by William Bowman, Esq.

(Abstract.)

The Chameleon's retina is peculiar in having a fovea and pecten, and in the nervous conducting fibres crossing the connective-tissue fibres instead of running parallel to them. The fovea was discovered by Knox in 1823, and minutely described by H. Müller, who also discovered the singular arrangement of the two sets of fibres in 1862. It is a circular pit situated at the posterior pole of the eyeball. A dark brown dot, surrounded by a lighter areola, marks its centre. Here the bacillary layer, which contains cones only, is alone present. The cones of the fovea are long, slender cylinders placed vertically upon the choroid. From the centre of the fovea outwards, the cones become stouter, shorter, and more numerous towards the periphery of the retina,

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where they are flask-shaped. The other layers reach their maximum development around the fovea at successively increasing distances from its centre. From the inner ends of the cones, fine fibres proceed obliquely from the outer to the inner surface of the retina in a radial direction from the centre of the fovea to the periphery of the retina. These fibres connect the cones with the cells of the outer granule-layer; they next form a thick plexus at the inner surface of this layer, which I term the cone-fibre plexus; then traverse the inner granule-layer, in which they connect themselves with round and roundly oval cells, and are continued through the medium of the ganglion-cell-like cells of this layer into the granular layer, where they join the processes directed outwards from the cells of the ganglionic layer. *Thus they constitute an anatomical path between the cones and optic nerve-fibres.*

These oblique nervous fibres are crossed by vertical fibres of modified connective tissue directed radially from the centre of the eyeball. Around the fovea the connective fibres traverse the cone-fibre plexus and the outer granule-layer in the form of stout vertical pillars corresponding to those which in the turtle I named the outer radial fibres; while in the thinner periphery of the retina, the vertical, connective-tissue fibres are finer, and traverse all the layers between the inner and outer limiting membranes.

The pecten lies excentrically at 1''' from the centre of the fovea. Its minute structure agrees with that of the Gecko's.

The distribution of the optic nerve-fibres with respect to the fovea resembles that which obtains with reference to the yellow spot in the human eye.

XVIII. "Additional Varieties in Human Myology." By JOHN WOOD, F.R.C.S., Demonstrator of Anatomy in King's College, London. Communicated by Dr. SHARPEY. Received June 9, 1865.

In the past winter session thirty-six subjects have been dissected in the Anatomical Rooms at King's College. In them the author has directed especial attention to the combinations of muscular aberrations in the same individual, with a view to obtain data for ascertaining any relation that may subsist between such abnormalities in different parts of the body.

In one subject, a muscular man about 5 feet 8 inches high, with prominent features, aquiline nose, somewhat high cheek-bones, well-pronounced chin, and good skull-development, an extensive departure from the ordinary type was observed in every part of the body, the abnormalities being more numerous than in any other subject previously noted.

In the neck, on both sides, was a well-developed and powerful *levator claviculæ,* in all respects like that first described and figured by the author in a paper read last year before the Royal Society. It was connected